

Universal Tap Material Guide

Tap Material				Unimaster Taps				Guhring Power Taps				
Material Group			Hardness HB	Tensile Strength N/mm ²	Blue	Gold	Bright	PM	NR50/C TiN	N/B TiN	NR40/C VAP	N/B VAP
P	11	Magnetic soft steels	< 120	< 400	●	●	●		●	●	●	●
	12	Structural steels, case carburizing steels	< 200	< 700	●	●	●	○	●	●	○	○
	13	Plain carbon steels	< 250	< 850	●	●	●		●	●	○	○
	14	Alloy steels	< 250	< 850	●	●	●	○	●	●		
H	15	Alloy steels/Hardened & Tempered Steels	< 350	< 1,200	●	○	○					
	16	Alloy steels/Hardened & Tempered Steels	> 350	> 1,200								
M	21	Free Machining stainless steel	< 250	< 850	○	○	○	●	●	●	○	○
	22	Austenitic stainless steel	< 250	< 850	○	○	○	●	●	●	○	○
	23	Ferritic, Ferritic+Austenitic, Martensitic	< 300	< 1,000	○	○	○	●	●	●	○	○
K	31	Grey cast iron	< 150	< 500	●	●	●		●	●	○	○
	32	Grey cast iron	< 300	< 1,000	●	●	●		●	●	○	○
	33	Nodular graphite, Malleable cast irons	< 200	< 700	●	●	●		●	●	○	○
	34	Nodular graphite, Malleable cast irons	< 300	< 1,000	●	●	●		●	●	○	○
S	41	Titanium, unalloyed	< 200	< 700	●	●	●		○	○	○	○
	42	Titanium, alloyed	< 270	< 900	○	○	○		○	○	○	○
	43	Titanium, alloyed	< 350	< 1,250					○	○	○	○
	51	Nickel, unalloyed	< 150	< 500	●	●	●		○	○		
	52	Nickel, alloyed	< 270	< 900	○	○	○		○	○		
	53	Nickel, alloyed	< 350	< 1,250					○	○		
N	61	Copper, unalloyed	< 100	< 350	○	●	●	○			●	●
	62	Short chipping Brass, Bronze, Copper	< 200	< 700	○	●	●				●	●
	63	Long chipping Brass, Bronze, Copper	< 200	< 700	○	●	●				●	●
	64	AMPCO (Cu-Al-Fe alloys)	< 470	< 1,500							●	●
	71	Aluminium, Magnesium, unalloyed	< 100	< 350							●	●
	72	Aluminium, alloyed Si <0.5%	< 150	< 500	○	●	●				●	●
	73	Aluminium, alloyed Si <10%	< 120	< 400	○	●	●		●	●	○	○
	74	Aluminium, alloyed Si >10%	< 120	< 400	○	●	●		●	●	○	○